UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,623	01/18/2002	Kelvin Chong	2102299-991110	5779

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NAHAR, QAMRUN

ART UNIT	PAPER NUMBER
2191	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/054,623	CHONG ET AL.
	Examiner	Art Unit	
	Qamrun Nahar	2191	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 February 2006</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-4,6-14,16-22 and 24-26</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-4,6-14,16-22 and 24-26</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   This action is in response to the RCE filed on 02/08/2006.

2.   The rejection under 35 U.S.C. 102(b) as being anticipated by Flores (U.S.

5,630,069) to claims 1-4, 6-12, 19-22 and 24-26 is moot in view of new ground(s) of

rejection.

3.   The rejection under 35 U.S.C. 103(a) as being unpatentable over Flores (U.S.

5,630,069) in view of Ambler (U.S. 6,393,456) to claims 13-18 is moot in view of new

ground(s) of rejection.

4.   Claims 1, 7, 13, 19 and 24 have been amended.

5.   Claim 15 has been canceled.

6.   Claims 1-4, 6-14, 16-22 and 24-26 are pending.

7.   As previously indicated in the previous Office Action (Mailed on 11/18/2004, par.

2), the oath/declaration is objected to.

Response to Amendment

Claim Rejections - 35 USC § 101

8.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

9.   Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

Claims 1, 7 and 13 recite steps that do not require any hardware element. That is,

these claims recite functional descriptive material, per se, which does not fall under any

of the statutory categories.

Claims 2-4, 6, 8-12, 14 and 16-18 are rejected for failing to cure the deficiencies

of the above rejected base claims.

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

11.   Claims 1-4, 6-12, 19-22 and 24-26 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Flores (U.S. 5,630,069) in view of Christfort (US 2002/0138617 A1).

Per Claim 1 (Amended):

Flores teaches a first module adapted to allow a developer to visually design

workflow describing an application, the workflow comprising a plurality of layers (col. 5,

lines 35-40 and col. 7, lines 10-30); and a second module adapted to allow a developer to

design views for said application (col. 5, lines 41-45).

However, Flores does not explicitly teach a multi-channel application capable of

operating over a plurality of channels, comprising a plurality of layers, wherein each of

said layers corresponds to at least one channel of said multi-channel application or a third

module adapted to allow a developer to integrate data sources within said multi-channel application.

Christfort teaches a multi-channel application capable of operating over a plurality of channels, comprising a plurality of layers, wherein each of said layers corresponds to at least one channel of said multi-channel application (e.g. see par. 66 and 95; The multi-channel application communicates with various devices using plurality of channels of communication.); and a third module adapted to allow a developer to integrate data sources within said multi-channel application (e.g. see par. 101-103).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the system disclosed by Flores to include a multi-channel application capable of operating over a plurality of channels, comprising a plurality of layers, wherein each of said layers corresponds to at least one channel of said multi-channel application; and a third module adapted to allow a developer to integrate data sources within said multi-channel application using the teaching of Christfort. The modification would be obvious because one of ordinary skill in the art would be motivated to provide improved techniques for designing applications that more effectively work with all devices (Christfort, par. 21, lines 1-3).

Per Claim 2:

The rejection of claim 1 is incorporated, and the combination of Flores and Christfort further teaches comprising an interactive development environment for allowing a developer to interact with said first, second and third modules to design said

multi-channel application (e.g. see Flores, col. 14, lines 33-41; the MVC paradigm allows

the interaction; and e.g. see Christfort, par. 63-65).

Per Claim 3:

The rejection of claim 2 is incorporated, and the combination of Flores and

Christfort further teaches wherein said interactive development environment comprises a

graphical user interface for allowing a developer to visually interact with said first,

second and third module (e.g. see Flores, col. 14, lines 33-41; and e.g. see Christfort, par.

63-65).

Per Claim 4:

The rejection of claim 1 is incorporated, and Christfort further teaches wherein

said system is adapted to allow a developer to design multi-modal applications (e.g. see

par. 66 and 95).

Per Claim 6:

The rejection of claim 5 is incorporated, and Christfort further teaches wherein

said system is adapted to allow a developer to design multi-channel applications

including at least two channels selected from the group comprising voice channels, web

channels, and wireless web channels (e.g. see par. 66).

Per Claim 7 (Amended):

This is another version of the claimed system discussed above (claims 1 and 2), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also obvious.

Per Claim 8:

The rejection of claim 7 is incorporated, and the combination of Flores and Christfort further teaches wherein said interactive development environment provides a graphical interface for independently displaying and designing said plurality of layers (e.g. see Flores, col. 14, lines 33-41; and e.g. see Christfort, par. 63-65).

Per Claim 9:

The rejection of claim 8 is incorporated, and Christfort further teaches wherein said interface is adapted to independently display a root layer including states common to each of said channels of said multi-channel application, and to allow a developer to visually design said root layer (e.g. see par. 66 and 95).

Per Claim 10:

The rejection of claim 9 is incorporated, and Christfort further teaches wherein said graphical interface is further adapted to independently display a voice layer including states common to a voice channel of said multi-channel application, and to allow a developer to visually design said voice layer (e.g. see par. 66 and 95).

Per Claim 11:

The rejection of claim 10 is incorporated, and Christfort further teaches wherein said graphical interface is further adapted to independently display a visual layer including states common to a visual channel of said multi-channel application, and to allow a developer to visually design said visual layer (e.g. see par. 66 and 95).

Per Claim 12:

The rejection of claim 11 is incorporated, and Christfort further teaches wherein said graphical interface is further adapted to display combinations of said root, voice and visual layers (e.g. see par. 66 and 95).

Per Claim 19 (Amended):

This is a method version of the claimed system discussed above, claim 1, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above, including "said application workflow describing certain business logic and comprising a plurality of states and a plurality of transitions"; "linking said states; and converting said application workflow into an application descriptor for delivering the application over at least one of the plurality of channels" (Flores, e.g. see col. 3, lines 56-67; col. 5, lines 9-12 and lines 35-40; col. 7, lines 10-30; and col. 14, lines 33-41; and Christfort, see par. 66 and 95). Thus, accordingly, this claim is also obvious.

Per Claim 20:

The rejection of claim 19 is incorporated, and the combination of Flores and Christfort further teaches comprising the step of: designing a presentation of said

application within said visual development environment (e.g. see Flores, col. 14, lines 33-41; and e.g. see Christfort, par. 63-65).

Per Claim 21:

The rejection of claim 20 is incorporated, and Christfort further teaches comprising the step of: internationalizing said presentation of said application within said visual development environment (e.g. see par. 95).

Per Claim 22:

The rejection of claim 21 is incorporated, and Christfort further teaches comprising the step of: integrating data sources into said application by use of said visual development environment (e.g. see par. 101-103).

Per Claim 24 (Amended):

The rejection of claim 20 is incorporated, and the combination of Flores and Christfort further teaches wherein said application workflow is designed in said plurality of layers, wherein each layer includes states and transitions common to at least one channel of said application (Flores, e.g. see col. 3, lines 56-67; and Christfort, e.g. see par. 66 and 95).

Per Claim 25:

The rejection of claim 19 is incorporated, and Flores further teaches comprising the step of: componentizing a plurality of said states and transitions into a reusable sub-

model within said visual development environment (e.g. see col. 4, lines 53-57; the

records are reusable sub-model).

Per Claim 26:

The rejection of claim 21 is incorporated, and Flores further teaches comprising

the step of: packaging said application workflow into a reusable component within said

visual development environment (e.g. see col. 4, lines 53-57; the records are reusable

component).

12.   Claims 13-14 and 16-18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Flores (U.S. 5,630,069) in view of Christfort (US 2002/0138617 A1),

and further in view of Ambler (U.S. 6,393,456).

Per Claim 13 (Amended):

Flores teaches a graphical user interface adapted to allow a user to visually build a

workflow for an application (e.g. see col. 5, lines 9-12 and lines 35-40; and col. 7, lines

10-30). However, Flores does not explicitly teach a multi-channel application capable of

operating over a plurality of channels, comprising a plurality of layers, wherein each of

said layers corresponds to at least one channel of said multi-channel application or a

module for converting said visually built workflow into a markup language.

Christfort teaches a multi-channel application capable of operating over a

plurality of channels, comprising a plurality of layers, wherein each of said layers

corresponds to at least one channel of said multi-channel application (e.g. see par. 66 and

95; The multi-channel application communicates with various devices using plurality of channels of communication.).

Ambler teaches a module for converting said visually built workflow into a markup language ("The workflow specifications are proposed to be written in extensible Mark-up Language (XML), which provides a robust tool for specifying workflows." in column 8, lines 43-46; The visually built workflow is represented by workflow specifications, which is converted into XML.).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the system disclosed by Flores to include a multi-channel application capable of operating over a plurality of channels, comprising a plurality of layers, wherein each of said layers corresponds to at least one channel of said multi-channel application; and a module for converting said visually built workflow into a markup language using the teaching of Christfort and Ambler. The modification would be obvious because one of ordinary skill in the art would be motivated to provide improved techniques for designing applications that more effectively work with all devices (Christfort, par. 21, lines 1-3) and use a standard language such as XML that allows greater flexibility.

Per Claim 14:

The rejection of claim 13 is incorporated, and Ambler further teaches wherein said markup language comprises an XML-based language (e.g. see col. 8, lines 43-46).

Per Claim 16:

The rejection of claim 13 is incorporated, and the combination of Flores and Christfort further teaches wherein said graphical user interface is adapted to allow a user to visually build a single workflow for a multi-channel application capable of operating in a plurality of modes (Flores, e.g. see col. 3, lines 56-67; and Christfort, e.g. see par. 66 and 95).

Per Claim 17:

The rejection of claim 13 is incorporated, and the combination of Flores and Christfort further teaches a second graphical user interface adapted to allow a developer to build views of multi-channel application (Flores, e.g. see col. 5, lines 41-45; and Christfort, e.g. see par. 66 and 95); and Ambler further teaches a second module adapted to convert said built views into a markup language (e.g. see col. 12, lines 49-59).

Per Claim 18:

The rejection of claim 17 is incorporated, and Ambler further teaches wherein said markup language comprises an XML-based language (e.g. see col. 8, lines 43-46).

Response to Arguments

13.   Applicant's arguments with respect to claims 1-4, 6-14, 16-22 and 24-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14.   Any inquiry concerning this communication from the examiner should be directed

to Qamrun Nahar whose telephone number is (571) 272-3730. The examiner can

normally be reached on Mondays through Fridays from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wei Y Zhen, can be reached on (571) 272-3708. The fax phone number for

the organization where this application or processing is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the TC 2100 Group receptionist whose telephone

number is 571-272-2100.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

QN
April 27, 2006

WEI ZHEN
SUPERVISORY PATENT EXAMINER